



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
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ATLANTA, GEORGIA 30303-8960

May 5, 2009

Mr. Tom Walker, Chief  
Wilmington Regulatory Field Office  
U.S. Army Corps of Engineers  
69 Darlington Avenue  
Wilmington, NC 28403

SUBJECT: Topsail Beach Interim Beach Fill Project, North Carolina – Final  
Supplemental Environmental Impact Statement  
CEQ # 20090097; ERP # COE-E11060-NC

Dear Mr. Walker:

Pursuant to Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the Final Supplemental Environmental Impact Statement (Final EIS) issued by the U.S. Army Corps of Engineers (Corps) for the subject project. Under Section 309 of the CAA, EPA is responsible for reviewing and commenting on major federal actions significantly affecting the quality of the human environment.

The Town of Topsail Beach, located in Pender County, North Carolina, proposes to fully fund and construct a one-time interim (“emergency”) beach fill project until such time that a larger federally-authorized shore protection project can be implemented. The project proposes to place up to 975,000 cubic yards of sand fill onto a 4.7 mile long section of the beach, and is scheduled to occur within the allowable dredging period from November 16, 2009 and March 31, 2010. The proposed emergency beach fill project is designed to mitigate for existing and potential storm damage and critical beach erosion along the shoreline of Topsail Beach.

It is our understanding that the project now proposes to reduce the proposed borrow site by eliminating the use of cuts #1 and #2 of Borrow Area X and to move the landward boundary of cut #3 100 feet seaward. The borrow area was expanded seaward to compensate for the inshore cuts dropped. These revisions are proposed to avoid direct impacts to the New Topsail Inlet ebb tidal shoal area, an Essential Fish Habitat. EPA agrees with this modification to the project. However, we still have reservation about the accuracy of the sand search surveys used to define an environmentally sound borrow area. The sand search investigation included the larger Borrow Area A, designated by the Corps, further offshore. However, the sand suitability data found the particle size unsuitable, and this differed from data from previous surveys of this site. EPA

understands the physical variability of offshore bottom composition, including the additional concern of impacting hard bottom habitat within Borrow Area A. Nevertheless, it is important for the borrow site evaluations related to the future federally sponsored beach restoration project to carefully consider this most recent data.

In our comments on the Draft document, EPA questioned the apparent high beachfront property values shown in the economic analysis. The response to the comment indicated that the values were based on appraisals in the Pender County tax (digest). Perhaps our comment was unclear and should have asked for property valuations given their present condition and diminished beachfront. The market value of a property is what a willing buyer and a seller agree to be the sales price. A comparison of the property sales prices in 2008-2009 with the tax valuations for the corresponding time period might reveal a wide disparity.

EPA pointed to the omission of a description of sand borrow cuts after dredging is completed. This is highly relevant to the description of the project impacts and should be in the project description in the main document circulated for review, not just in an obscure table in Appendix B. All 5 subsections of Appendix B (Geotechnical Investigations Report) on the CD provided were opened, and Table 5 defining the post-dredging cut contours or depths was not found. We have the same comment for the location of the Corps' responses to comments on the Draft SEIS which were found on the CD in Appendix A, Subpart 4.

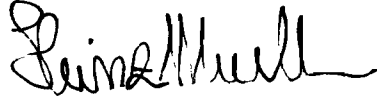
EPA expressed concern about possible impacts to Lea/Hutaff Island as a result of this project. The response to this comment is that the model results indicate no impacts would occur. The sand borrow site is directly offshore of the northern end of this island. Therefore, the beach erosion rates at this island should be monitored.

Section 6 of the document is devoted to minimization and avoidance measures and environmental monitoring. Formation of escarpments at the water's edge of the placed beach fill is noted during the post construction "equilibration process" as the unconsolidated fill material erodes seaward at high tide. This can inhibit female sea turtles from moving to dry beach nesting sites. The situation will be monitored but corrective action is indefinite and no responsible party is identified. In a more general sense, there is a great deal of monitoring proposed to occur during and after construction, including water quality and biological resources, but this section of the document does not define what (if any) corrective actions (adaptive management) will be undertaken if unexpected adverse effects are indicated. What if the model results of sediment movement are incorrect or the expected environmental responses are not optimal? These eventualities need to be defined in the monitoring plan and in the NEPA Record of Decision.

In summary, EPA continues to have concerns about the proposed project. We recommend that the monitoring plan be supplemented with appropriate corrective actions in the event the adverse impacts are greater than expected.

Thank you for the opportunity to review and comment on the Final SEIS. Please provide the Record of Decision to EPA and include us in notifications of future interagency meetings. If you wish to discuss EPA's comments, please contact me at (404) 562-9611 ([mueller.heinz@epa.gov](mailto:mueller.heinz@epa.gov)) or Ted Bisterfeld of my staff at (404) 562-9621 ([bisterfeld.ted@epa.gov](mailto:bisterfeld.ted@epa.gov)).

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", with a stylized, flowing script.

Heinz J. Mueller, Chief  
NEPA Program Office